

## Claims

[1] 1. In a receive sensitivity measuring device including a terminal for transmitting a test signal through communication with a receive sensitivity measuring path so as to measure the receive sensitivity of a communication system including a transmit and receive path and a receive-only path, a receive sensitivity measuring device including a receive-only path, comprising:

- a first transmitter for receiving a signal from the transmit and receive path, and transmitting the signal to the terminal;
- a second transmitter for receiving a signal from the receive-only path, and transmitting the signal to the terminal;
- a first receiver for receiving a test signal from the terminal, and transmitting the test signal to the transmit and receive path;
- a second receiver for receiving a test signal from the terminal, and transmitting the test signal to the receive-only path;
- a signal selector, for selecting one of the first and second receivers connected to the signal selector and a receive sensitivity measuring path so that one of the first and second receivers may be selectively connected to the terminal; and
- a combiner, connected to the first and second transmitters and the first and second receivers, for combining a plurality of input signals into a single signal, and transmitting the single signal to the terminal, wherein the terminal transmits the test signal to the receive sensitivity measuring path so that the corresponding receive sensitivity measuring path may measure a cable loss to the terminal and the receive sensitivity generated by using the test signal transmitted by the terminal.

[2] 2. The receive sensitivity measuring device of claim 1, wherein the terminal establishes a test signal and transmits the test signal to the receive sensitivity measuring path through a communication with the receive sensitivity measuring path.

[3] 3. The receive sensitivity measuring device of claim 1, wherein the terminal transmits the lowest receive level signal to the receive sensitivity measuring path, the lowest receive level signal being acceptable to the receive sensitivity measuring path.

[4] 4. The receive sensitivity measuring device of claim 1, wherein the terminal is attachable to and removable from the receive sensitivity

measuring device.

- [5] 5. The receive sensitivity measuring device of claim 1, further comprising a coupler installed in an antenna coupled to the transmit and receive path and the receive-only path so as to communicate signals with the first and second transmitters, the first and second receivers, and the receive sensitivity measuring path.
- [6] 6. The receive sensitivity measuring device of claim 1, wherein, in order to measure the receive-only path, the terminal communicates with the receive-only path through the first transmitter coupled to the transmit and receive path and the second receiver coupled to the receive-only path.
- [7] 7. The receive sensitivity measuring device of claim 1, wherein the terminal is established with a plurality of frequencies, and is allowed to transmit the test signal.
- [8] 8. The receive sensitivity measuring device of claim 1, wherein the signal selector is a switch for performing a switching operation according to a user selection.
- [9] 9. The receive sensitivity measuring device of claim 1, further comprising a timer for automatically turning off the receive sensitivity measuring device when the terminal transmits the test signal and a predetermined time has passed.
- [10] 10. In a receive sensitivity measuring method using a measuring device coupled to a communication system including a transmit and receive path and a receive-only path, the measuring device including a terminal for outputting a test signal to a receive sensitivity measuring path through a communication with the receive sensitivity measuring path from among the transmit and receive path and the receive-only path, a receiving sensitivity measuring method of a communication system including a receive-only path, comprising:
  - (a) the receive sensitivity measuring path receiving the test signal from the terminal;
  - (b) calculating a cable loss between the receive sensitivity measuring path and the terminal; and
  - (c) allowing the receive sensitivity measuring path to use the test signal level transmitted by the terminal in (a) and the cable loss measured in (b) to measure a receive sensitivity of the receive sensitivity measuring path, and determine normal states.

- [11] 11. The receiving sensitivity measuring method of claim 10, wherein when the receive sensitivity measuring path in (a) is a receive-only path, the terminal uses a transmission function of the transmit and receive path and a receiving function of the receive-only path, and establishes test signals to be transmitted to the receive-only path.
- [12] 12. The receiving sensitivity measuring method of claim 10, further comprising: checking that the terminal of the measuring device has transmitted the test signal and the receive sensitivity measuring path has received the corresponding test signal, and turning off the measuring device.
- [13] 13. The receiving sensitivity measuring method of claim 10, wherein the test signal transmitted by the terminal is the lowest receive level signal to be received by the corresponding receive sensitivity measuring path.
- [14] 14. The receiving sensitivity measuring method of claim 10, further comprising turning off the measuring device when the terminal transmits the test signal and a predefined time has passed